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Serial No. : 09/926694
Applicant : Ulli
Filing date : December 4, 2001
Title : Method and Device for Partially Applying a Surface Coating and
Breathable Film With Such a Partial Surface Coating
TC/A.U. : 1771
Examiner : Zirker
Docket No. : 5085
Customer No. : 26936

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPELLANTS' BRIEF ON APPEAL TO
THE BOARD OF PATENT APPEALS AND INTERFERENCES

Sir:

This is appellant's brief on appeal to the Board of Patent Appeals and Interferences, from the final rejection of claims 8 - 10, 13 and 14 of the application identified above.

REAL PARTY IN INTEREST

The owner of this application is Solipat AG, a Swiss company having a place of business at Chamerstrasse 79, Zug, Switzerland.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

STATUS OF CLAIMS

Claims 8 - 10, 13 and 14 are now at issue. Those claims, as most recently amended, are reproduced in the appendix at the end of the brief. Claims 1 - 7 have been canceled, and claims 11 and 12 were withdrawn from consideration.

STATUS OF AMENDMENTS

All amendments have been entered.

SUMMARY OF CLAIMED SUBJECT MATTER

Both sides 4a,4b of a breathable material substrate W (Fig. 1) are coated with adhesive, the coating 2a,2b on either side being in discontinuous patterns which are at least partially aligned with one another, so that the substrate has areas which are coated on both sides and areas which are uncoated on both sides. This preserves the breathability of the substrate, which may then be used as the center ply of a three-ply laminate, between outer plies Ma,Mb.

GROUND OF REJECTION

The issue on appeal is whether claims 8 - 10 and 13 - 14 would have been obvious over the prior art, including admitted prior art, U.S. Patent 4732800 (Groshens '800) and U.S. Patent 5827579 (Groshens '579).

GROUPING OF CLAIMS

Claim 9 is not patentable if claim 8 is not. Otherwise, we do not admit that any of the claims at issue stand or fall together.

ARGUMENT

The invention recited in claims 8 - 10 and 13 - 14 is not *prima facie* obvious from the prior art of record.

The PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. *In re Fine*, 837 F. 2d 1071, 5 USPQ 2d 1596,1598 (Federal Circuit 1988).

Claims 8 - 10, 13 and 14 were rejected over alleged admissions by applicant in view of either Groshen '579 or Groshens '800.

The alleged admission is "that the structure of a suitable air-permeable, water impermeable substrate which can be an air permeable, water impermeable fabric that is coated on one surface with a desired pattern of adhesive dots and which the Examiner believes is clearly within the skill of the art to coat on the opposing opposite surface with another desired pattern of adhesive dots to form an intermediate product is known, as is the subsequent lamination of this particular double sided adhesive coated fabric which is laminated to a sheet of a suitable material on each of its outer surfaces."

While we do not fully understand the above quotation, we admit that it has been known to coat one side of a breathable material with an adhesive in order to form a two-ply fabric. Any admission was not for coating air-permeable water impermeable materials specifically. Additionally, we deny having admitted that it was known to coat both sides of a breathable material with an adhesive in order to form a three-ply fabric.

The Groshens patents would not have motivated a person of ordinary skill in the art to place a discontinuous adhesive surface coating on both surfaces of an air-permeable, water imper-

meable substrate. Neither Groshens patent discloses an air-permeable, water impermeable substrate or provides any motivation either (a) to form at least partially aligned discontinuous adhesive surface coatings on both sides of an air-permeable, water impermeable substrate, as recited in claim 8, or (b) to make a three-ply laminate from such a product, as recited in claim 10.

The Groshens patents deal with interlinings and their manufacture. Those patents teach one to apply a *non-adhesive* material to the opposite side of a web-like material which carries an adhesive. The non-adhesive material may be thermoplastic, but it has low thermoplastic creep, so that it is not adhesive. The purpose of Groshens' non-adhesive layer to keep adhesive on the opposite side from penetrating the substrate. (See for example on page 3, lines 64 to 66 of Groshens '800: "less heat-fusible layer 6 consists of a non-stick substance" or Groshens '579, column 3, lines 42 to 45: "second layer 7 acts as a barrier or a shield with respect to the first layer 5". Column 4, line 31 states that the second layer 7 can include an antiadhesive.) The intermediate product of Groshens was useful for making only two-layer laminates, since one coating was non-adhesive. That coating was applied not to make the substrate adhere to another layer, but rather to prevent adhesive penetration from the opposite side of the same layer. The Groshens patents actually teach away from the idea of placing adhesive on both sides, and consequently, of making a three-ply product.

The Japanese '172 reference discloses forming "paste" dots on both sides of a sheet material. However, the document provides no teaching or motivation to use this technology for an air permeable, water impermeable substrate, nor is an at least partial alignment of the resulting dots part of the '172 invention. Moreover, the reference does not explain the nature of the dots. They could be for purposes such as decoration or to prevent sliding, in which case it would not matter if they blocked air flow through the structure.

The Declaration of Andreas Ulli, filed June 17, 2004 with accompanying product samples, reported the results of careful testing done on the claimed invention for air permeability. The inclusion of some materials on test standards only in German does not detract from the

understandability of the declaration, or the conclusions reached by the declarant. The test results demonstrated surprising superiority (40% increase in permeability) of the "PIP" laminate claimed in Figure 10, when compared with a standard lamination in which the adhesive dots were not aligned. This result was not predicted by the references.

Inasmuch as a three-ply laminate having an internal layer of an air permeable, water impermeable substrate coated on opposite sides with at least partially aligned, discontinuous adhesive surface coatings is not disclosed in or suggested by the references, and considering the evidence of the efficacy of the invention, the rejections of claims 8 and 10 ought to be reversed.

Claim 13 is patentable even if claim 10 is not. Claim 10 covers constructions in which the patterns on each side of the substrate are perfectly aligned as well as those in which there is some misalignment, whereas claim 13 requires that the patterns be only partially aligned. The Groshens patents, which show dots which may be randomly distributed, nevertheless require that the dots on opposite sides of the fabric be wholly aligned in order to perform their function. The Groshens patents do not disclose or suggest only partial alignment. Claim 14 is patentable even if claim 8 is not, for the same reason.

Respectfully submitted,

Charles W. Fallow

Charles W. Fallow
Reg. No. 28,946

Shoemaker and Mattare, Ltd.
10 Post Office Road
Silver Spring, MD 20910
(301) 589-8900

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Robyn S. Fallow

Robyn S. Fallow

APPENDIX – CLAIMS ON APPEAL

8. An air-permeable, water impermeable structure comprising
- an air-permeable water impermeable substrate having a first surface and a second surface opposite the first surface,
 - a first adhesive surface coating deposited in a discontinuous pattern on the first surface of the substrate and
 - a second adhesive surface coating deposited in a discontinuous pattern on the second surface of the substrate wherein
 - the discontinuous adhesive surface coating pattern of the first surface of the substrate is at least partially aligned with the discontinuous adhesive surface coating pattern of the second surface, so that the substrate has areas which are coated on both surfaces and areas which are uncoated on both surfaces.
9. A substrate according to claim 8, wherein the surface coatings include adhesive dots.
10. A sheet formation containing
- an air permeable, water impermeable substrate having a first surface and a second surface opposite the first surface,
 - a first sheet of a material laminated to the first surface of the substrate by a first adhesive coating on the first surface of the substrate, and
 - a second sheet of a material laminated to the second surface of the substrate by a second adhesive coating on said second surface of the substrate,
 - wherein both the first and second adhesive surface coatings are deposited in discontinuous patterns on both the first and second surfaces of the substrate, and
 - the adhesive surface coating pattern of the first surface of the substrate is at least partially aligned with the adhesive surface coating pattern of the second surface of the substrate, so that the substrate has areas which are coated on both the first and second surfaces and areas which are uncoated on both the first and second surfaces.

13. A sheet formation according to claim 10, wherein the adhesive surface coating of the first surface of the substrate is only partially aligned with the adhesive surface coating of the second surface.

14. An air permeable, water impermeable structure according to claim 8, wherein the adhesive surface coating of the first surface of the substrate is only partially aligned with the adhesive surface coating of the second surface.

APPENDIX - RELATED PROCEEDINGS

There are no other proceedings relating to the subject matter of this appeal.

APPENDIX - EVIDENCE

The Declaration of Andreas Ulli, filed June 17, 2004, is attached. The examiner entered and considered the declaration: see page 4 of the office action dated September 8, 2004.